Packet-Radio Digest   Wed, 15 Sep 93   Volume 93 : Issue 270

Today's Topics:
                 9600 baud - commercially available?
                    baycom modem driver for NOS
                        Digipeater (2 msgs)
                 how to put MFJ TNC-2 into KISS mode?
                 HOW TO WIRE TINY2<=>TINY2 NODE?????
                    Info Requested: Converse Node
                     Maycom with Macs?? (2 msgs)

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 14 Sep 93 15:34:30 GMT
From: psinntp!arrl.org@uunet.uu.net
Subject: 9600 baud - commercially available?
To: packet-radio@ucsd.edu

In rec.radio.amateur.digital.misc, richgi@microsoft.com (Richard Gillmann)
writes:
>Can a 9600-baud packet station be set up entirely out of commercially
>available items (not kits)? This would have to include a TNC, a 9600-baud
>modem and a VHF or UHF radio.

   Gracilis sells the PackeTwin system with a plug-in card for your
IBM-compatible PC. It includes a 'DSY modem (9600 or 19,200 bit/s) and
a TEK 440-MHz transceiver (2 W). Handy! (Mine was working fine into the local
440-MHz Switch/Repeater until the foliage came out and killed my path. Gotta
raise that 11-element Yagi another 10-20 feet or so, I guess!)

>How about higher baud rates? 38.4K would be nice. At these higher rates, it
>becomes reasonable to transfer picture and sound files.

   It can also be set up to run at 19,200 kbit/s.

CUL es 73 de BB

 """
 Brian Battles, WS1O   I Tel   203-666-1541, ext 222 I "Radio amateurs
 QST Features Editor   I Fax   203-665-7531   I   do it with high
 ARRL HQ   I Internet bbattles@arrl.org   I   frequency"
 Newington, CT USA   I Amprnet ws1o@ws1o.ampr.org [44.88.0.87]
 """

Date: 15 Sep 93 12:51:13 NZST
From: news.cerf.net!pagesat!olivea!spool.mu.edu!wupost!waikato!comp.vuw.ac.nz!
newshost.wcc.govt.nz!kosmos.wcc.govt.nz!swain_i@network.ucsd.edu
Subject: baycom modem driver for NOS
To: packet-radio@ucsd.edu

Hi there would some nice person please send me the baycom modem driver
for the NOS package.. I don't have FTP access (bummer huh)... So if I
had an FTP site name it would not really help......

73 de ZL2IAS.. Ian

Date: 14 Sep 93 07:53:00 GMT
From: ogicse!hp-cv!sdd.hp.com!crash!3avenew!tuck.miller@network.ucsd.edu
Subject: DIGIPEATER
To: packet-radio@ucsd.edu

A digipeater works basically the same as a repeater, but on a smaller
scale. In packet as you know we have devices called a "tnc". Think of
this as a small repeater. I don't remember right off where you are
located, so I will give an example. Say I want to connect to a ham
located in Los Anegeles, and I am located in San Diego. I am not ablke
to connect direct to him direct, so I connect to him via someone else.
For example, the person I am calling call sign will be wa6abc, the
person I will be digipeating thru is wa6cba. I would type out
c wa6abc via wa6cba. So actually wa6bca is actually acting as a
repeater. Hope this helps out. 73, Tuck, KC6ZEC

Date: 15 Sep 93 04:46:49 GMT
From: news-mail-gateway@ucsd.edu
Subject: Digipeater
To: packet-radio@ucsd.edu

ON 13 Sep 93 14:30:39 GMT
FROM: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu

In response to:
>   How a digipeater work ? Is it same as a repeater ?

You wrote:
> A digipeater is a store and forward relay node......

If you would substitute "network node" (netrom node) in each instance
where you used "digipeater", your answer would be reasonably accurate.
It's no wonder newcomers are confused when even the "experts" don't know
to use the correct terminology.

Digipeating is an instantaneous retransmission mode available
(unfortunately) as a "feature" on virtually all TNCs. Digipeaters
do *NOT* store and forward; they do *NOT* test the frequency prior to
transmitting; and only at the destination station is the packet frame
tested for accuracy. Digipeating, as a mode, can be supported by most
netrom compatible nodes. Fortunately, it can also be disabled, as it
should be in virtually all cases.

That's it for now.

Doug Thompson, WG0B

===
Packet: wg0b@k0hyd.#scks.ks.usa.noam
tcp/ip: wg0b.ampr.org (44.122.0.8)
Internet: wg0b@delphi.com
Telconet: (316) 688-0004

STUFF: Junk we keep.....   JUNK: Stuff we throw away
===

Date: 14 Sep 93 04:58:20 GMT
From: ogicse!uwm.edu!cs.utexas.edu!oakhill!val!afarm!fredmail@network.ucsd.edu
Subject: how to put MFJ TNC-2 into KISS mode?
To: packet-radio@ucsd.edu

After the KISS ON command, issue RESTART, not RESET.
Ron W5RKN

Date: 15 Sep 93 04:49:38 GMT
From: news-mail-gateway@ucsd.edu
Subject: HOW TO WIRE TINY2<=>TINY2 NODE?????
To: packet-radio@ucsd.edu

ON Mon, 13 Sep 1993 10:57:00 GMT Dave, KN2M wrote:

>I have tried to use TheNet 2.10 for a back to back Tiny2 node by using
>the wiring diagram in the Tiny2 manual. Using that information the
>nodes work independently, but do not recognize that they are wired to
>each other.... I do not have ANY documentation on TheNet... How do I
>CORRECTLY attach two Tiny2 units together "back to back" with TheNet
>and create my intended node?????

First, the documentation files are bundled with the program for TheNet
and the ones which come with TheNet 2.10 are especially good. You
should get a copy for all of the other information they contain as well
as how to hook up your TNC.

However, the good news is: "The Pac-Comm Tiny2 TNC comes TheNet ready.
It may require a more complex DCD modification kit, also available
from TAPR." from TN210-5.DOC

The DCD modification kit description is:
"For the TNC-2 or clone, the VHF modification is extremely simple. It
consists of adding a capacitor and two resistors to the circuit board:
Replace R-73 with a 180K ohm resistor. Place a 180K ohm resistor
paralleled with a .01 Mfd capacitor on the underside of U-20, between
pins 3 and 6.
"   Note: To perform the above modification, it will be necessary to
de-install the TNC circuit board. An alternative method of doing
these mods would be to purchase a TNC DCD modification kit from the
Tucson Amateur Packet Radio Association (TAPR),
Telephone (602) 749-9479. Specify the TNC model number
when you order." - ibid.

The only other thing I might point out is that for connecting two
TNCs together, it is necessary to swap pins 2 and 3 (TXD and RXD)
on one of the two connectors (null modem type connection) and BOTH
connectors must jumper pin 10 to pin 23. At least, that's the case
for a plain TNC2 such as an MFJ1270.

I don't have a convenient way to ftp the 2.10 files, but imagine you
can find the zipped version in the hamradio directory on ucsd.edu.

Hope this information gets you going.

That's it for now.

Doug Thompson, WG0B

==
Packet: wg0b@k0hyd.#scks.ks.usa.noam
tcp/ip: wg0b.ampr.org (44.122.0.8)
Internet: wg0b@delphi.com
Telconet: (316) 688-0004

Cohen's Law: As a project matures, you will spend increasing
amounts of time reporting on work not being done. Stability
is achieved when you spend all of your time reporting why
you're doing nothing.
==

Date: 14 Sep 93 09:33:45 EDT
From: psinntp!arrl.org@uunet.uu.net
Subject: Info Requested: Converse Node
To: packet-radio@ucsd.edu

In rec.radio.amateur.digital.misc, clmorgan@miavx3.mid.muohio.edu writes:

>Looking for information and (hopefully! public domain software) to create
>a converse node. Whatever you'd be willing to share will be appreciated.

Carl,

  I suggest you run KA9Q's TCP/IP NOS with the Converse bridge compiled in.
I have JNOS110x9, by Johan Reinalda, WG7J, and it has a lot of nifty
features. You can pick it up via anonymous FTP from ucsd.edu. I think it's
in \hamradio\packet\tcpip\wg7j or \hamradio\packet\tcpip\jnos. The version
listed as JN110X9s.ZIP is the source files and JN110X9X.ZIP has the
executables. There are also some docs.
   If you've never tried running NOS before, I strongly suggest you find a
local "Elmer" who has (it can have a near-vertical learning curve!), or at
least FTP a file called 1229_NOS.ZIP (or something like that), which is
a basic doc file for the PA0GRI compilation of NOS (WG7J NOS is based on
PA0GRI's mods of the original KA9Q code). Another good starter package is
NOS View (NOSVW304.ZIP) by Ian Wade, G3NRW (author of the book "NOSIntro"),
a self-extracting, semi-self-configuring NOS package that helps you get a

TCP/IP packet station up and running for starters.

   NOS lets you (and users) run FTP, Telnet, SMTP, Callbook, NetROM,
Conference Bridge, and many other servers via packet radio, and can be
gatewayed or wormholed via Internet, etc. (Too much to cover here!) You run
it on a personal computer (there are versions for MS-DOS, Mac, Unix/Linux,
Sun, OS/2, etc), with any standard TNC that will run in KISS mode. It can
run multiple ports, landline modem (with a Serial Line Interface Protocol
"SLIP" port) and can be configured as a full-service forwarding PBBS that
talks to other TCP/IP users or "plain" AX.25 packet ops.

  GL, OM!

CUL es 73 de BB

 ""
 Brian Battles, WS1O   I Tel   203-666-1541, ext 222 I "Radio amateurs
 QST Features Editor   I Fax   203-665-7531   I   do it with high
 ARRL HQ   I Internet bbattles@arrl.org   I   frequency"
 Newington, CT USA   I Amprnet ws1o@ws1o.ampr.org [44.88.0.87]
 ""

Date: 14 Sep 93 13:40:50 GMT
From: news-mail-gateway@ucsd.edu
Subject: Maycom with Macs??
To: packet-radio@ucsd.edu

This is probably a FAQ and if it is I apologize. Does anyone on the list
know of Macintosh software to run a Baycom type modem? IF you do, would
you please email me or post it here. Thanx in advance,
Gordy - WA2RUP
BURDOGJ@SPLAVA.CC.PLATTSBURGH.EDU
BURDOGJ@SNYPLAVA.BITNET

Date: 14 Sep 93 15:37:27 GMT
From: ogicse!uwm.edu!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!
jvp@network.ucsd.edu
Subject: Maycom with Macs??
To: packet-radio@ucsd.edu

In <01H2XKLSPWH29JE136@splava.cc.plattsburgh.edu>
BURDOGJ@splava.cc.PLattsburgh.EDU (GORDY BURDO) writes:

>This is probably a FAQ and if it is I apologize. Does anyone on the list

>know of Macintosh software to run a Baycom type modem? IF you do, would
>you please email me or post it here. Thanx in advance,

First, you need SoftKiss which is a serial driver replacement. It drives
the BayComm or PacketMac modems and emulates a KISS TNC.

Then you have exactly two (to my knowledge) choices for application.

1) Savant - An AX.25 program that provides a multiple-window split screen
   true Macintosh GUI. Every time you open a new connection, a new window
   opens for that connection. Switching "channels" is as easy as clicking
   on a window to bring it to the front. Savant is smart enough to route
   all incoming packets to the right window and vice-versa. It also has
   other nice features like a Stations Heard window which constantly shows
   you the most recent 64 stations heard on the air, and how many packets
   they have recently sent, etc. Savant works with any TNC with KISS mode.

2) Net/Mac. A program written for a DOS machine, and ported to the Mac.
   It is hard to get working, and provides a terrible user interface, but
   it does tcp/ip.

I may be a bit biased, as I'm the author of Savant. :)

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| Ames, IA 50011 - internet: jvp@iastate or tools1.ee.iastate.edu |
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End of Packet-Radio Digest V93 #270
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